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Could House Crows Corvus splendens roost at only one site within eThekwini Municipality?

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Abstract

House Crows *Corvus splendens* are one of the world's most invasive bird species. It is originally from southern Asia but currently invading parts of South Africa including Durban in the KwaZulu-Natal Province. Its distribution across Durban has been studied to better understand and control the species population within the eThekwini Municipality. House Crow surveys are conducted monthly by eThekwini Municipality's Natural Resources Division officials in collaboration with South African National Biodiversity Institute (SANBI) by driving and walking along the roads and recording every bird sighting. During surveys, roosting sites have been discovered in the central parts of the city where House Crows are most active due to the availability of foraging sites and preferred habitat for their survival The Common Myna *Acridotheres tristis* is an adaptable invasive passerine which is closely associated with human environments.

Introduction

eThekwini Municipality (Durban) located in KwaZulu-Natal Province, South Africa, is one of the busiest port cities in the sub-Saharan Africa (Larnyoh 2020, Lloyd 2020). The municipal area is 2,297 km^2 and had a human population of c. 4.24 million in 2022 (eThekwini IDP 2024/2025). The municipality includes the City of Durban, surrounding towns and various tribal lands. It is also divided into four functional Municipal Planning Regions (MPR): Central, North, South and Outer West. The Central Region is the major economic hub with the port, the South is known for its coastal tourism and large residential population, the North includes industries and residential areas, and the Outer West is significant for its environmental management.

House Crow is reported to be one of the world's most invasive bird species occurring in c. 41 countries in the world. It is considered invasive 36 countries (GISD 2007). In South Africa, it is listed as Category 1a invasive species in terms of the National Environmental Management: Biodiversity Act 10 of 2004 – Alien and Invasive Species (AIS) Regulations. In terms of these regulations, species listed under Category 1a must be combatted and eradicated. House Crows mainly invade urban, semiurban or industrial areas benefiting from food scraps or refuse (Lim et al. 2003) and prefer staying in an area for their whole lives. Major disturbances such as population control could force them to move onto new areas or change roost sites (GISD 2007).

In general, crows choose their roosts near food resources to minimise flight costs (Vyas 1996). They prefer roosts with tall trees and dense canopy encompass with tall buildings, not far from their feeding grounds (Peh & Sodhi 2002, Mashao and Mhlongo, pers. obs). Also, they prefer roosts in areas with human activities and settlements. In urban areas they roost in less vegetated busy city centres (Peh & Sodhi 2002). Selection of sites as roost depends on various factors including reduction of wind velocity, prevention of heat loss by dense canopies (Walsberg 1986), protection from ground predators by tall trees/buildings and easy access to food from several anthropogenic opportunities (Shabanam et al. 2017).

According to Behrouzi-Rad (2013), c. 49% of the House Crow population on Kharg Island, Iran, roosts at a single site, a guest house

planted with *Eucalyptus* and *Ficus bengalensis* trees. In Singapore, they roost communally at various sites within the city (Behrouz Behrouzi-rad 2013, Peh & Sodhi 2002). In Machilipatnam, Andhra Pradesh, Inida, they often share communal roosts with the Large-billed Crow *Corvus macrorhynchos*, though they tend to arrive at the roost site later than the larger species (Mahesh & Suseela 2021). Their arrival times at the roost are significantly correlated with sunset and light intensity (Peh & Sodhi 2002).

In Durban only a single House Crow roost is known. The current assumption is that the entire population roosts at this one site. This study reports on this known roost and the possibility of it being the only one in the municipality.

Observation

Since August 2019, a group of about four observers has been conducting monthly surveys of House Crow within the eThekwini Municipality. Surveys were conducted by driving slowly along road networks, or by walking along roads searching for House Crows. Once House Crow/s are sighted the following information was recorded: time, date, location, number of birds, behaviour and any other relevant observations were noted. Outside planned surveys, *ad hoc* observations were also made. From the compiled monthly survey data, a House Crow distribution map was generated, feeding and breeding sites were recorded as well as activities and different behaviors (Figure 1). The most uncommon observation was the roost site. Only a single House Crow roost was recorded throughout the city of Durban. Although the roost site changed after few years, there was only one roost site during the period that the team has been making observations, 2019–2026.

An extensive search for the roost sites began in 2020 when it became evident that counting House Crows at roost sites provided the best estimates of population size. Up to that time, the West Street Cemetery (29°51’34.87”S, 31°00’53.20”E) was the only known roost site. West Street Cemetery was then monitored and used for population size estimation for birds in Durban. During that period, the population size was estimated to vary between 400 and 600 birds.

During 2023, House Crows stopped roosting at West Street Cemetery. A search for a new roost site was undertaken on 4 October 2023 and revealed that the birds had moved to a new roosting site (c. 2 km distant) at The Workshop, Durban Central (29°51’21.04”S, 31°01’27.55”E). The move to the new site was suspected to be due to the control method (shooting) done after sunset once they have settled (Figure 2).

Because it did not seem reasonable that House Crows would only roost at a single location within the municipality, other areas were also surveyed for roosts in the South Region of Durban, none were found. In July 2024, the team was informed about a potential House Crow roost site in the area of the Bluff (c, 14 km south of Durban Central). The area was surveyed on 8 August 2024 and no roost site was observed (Figure 3).

On 3 April 2025, The Workshop was revisited as part of the site monitoring and the team confirmed that House Crows were roosting on three *Vachellia xanthophloea* about 4 m apart but forming one canopy.

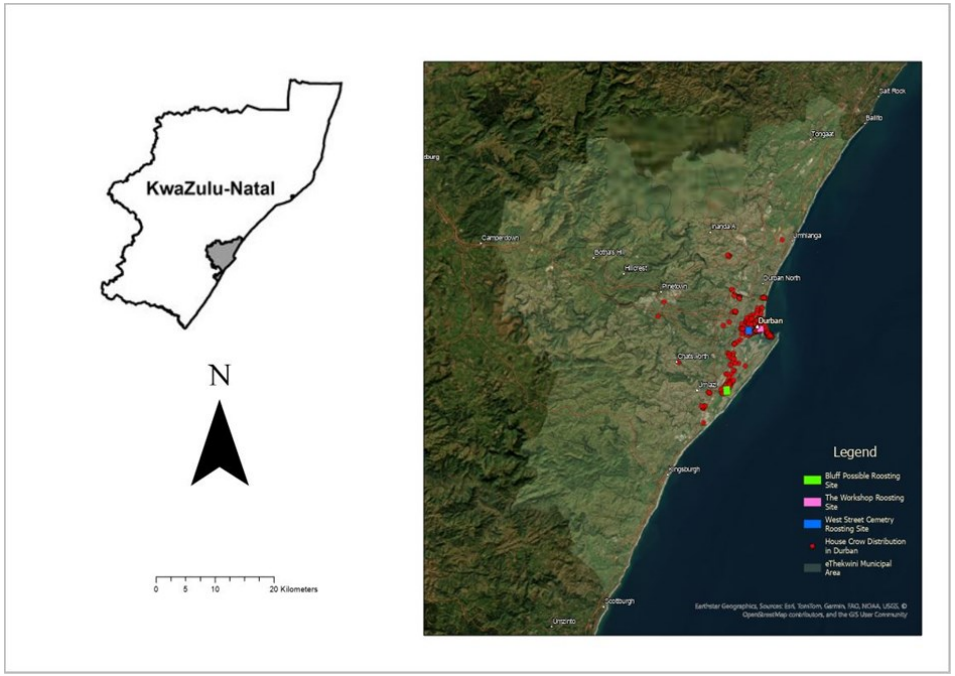

Figure 1: Map showing House Crow distribution within eThekwini Municipality, two roosting sites (one currently active) at The Workshop and one possible site in the Bluff.

Figure 2: Durban West Street Cemetery House Crow roost site, picture showing House Crows flying around.

Figure 3: The Workshop House Crow roost site, picture showing House Crows arriving on site.

Conclusion

With the surveillance team's dedication and effort, consistent data collection continues to reveal interesting information about House Crows in eThekwini Municipality. If indeed there is indeed only a single roost site within the city, this study shows that the distance House Crows travel daily to the roost site in the evening and back to the feeding site the next morning. This would be a distance of c. 18 km for birds in the Prospecton (30°00'12"S, 30°55'49"E) area in the South and c. 15 km for birds from Umhlanga (29°43'26"S, 31° 04'06"E) in the North.

References

Behrouzi-Rad B 2013. Status of population and roosting places of Indian House Crow *Corvus splendens* on Kharg Island in Persian Gulf. Journal of Environmental Conservation Research 1: 59–66.

eThekwini Independent Development Plan 2024/2025. Available online at https://www.durban.gov.za/uploads/0000/6/2025/08/14/integrated-development-plan-idp-plain-english-2024-2025.pdf (Accessed on 13 April 2026).

GISD 2007**.** *Corvus splendens*. Global Invasive Species Database of the IUCN/ISSG (Invasive Species Specialist Group of the World Conservation Union). Fact sheet compiled by G G Meier. Available online at https://www.iucngisd.org/gisd/speciesname/Corvus+splendens (Accessed on 13 April 2026).

Larnyoh MT 2020. Six of Africa's largest ports. Business Insider Africa. Available online at https://africa.businessinsider.com/local/markets/6-of-africas-largest-ports/304zly9 (Accessed on 13 April 2026).

Lim HC, Navjot SS, Barry WB, Malcom CKS 2003. Undesirable aliens: factors determining the distribution of three invasive bird species in Singapore. Journal of Tropical Ecology 19: 685–695.

Lloyd's List Intelligence 2020. One Hundred Ports 2020: The Definitive Ranking of the World's Largest Container Ports. Available online at https://www.lloydslist.com/one-hundred-container-ports-2020 (Accessed on 13 April 2026).

Mahesh V, Suseela L 2021. Roosting behaviour and roosting interactions between House Crow *Corvus splendens* and Large-billed Crow *Corvus macrorhynchos* at Machilipatnam, India. International Journal of Zoological Investigations 7: 414–420.

Ojha AK, Kumar P 2024. Population trend of House Crow (*Corvus splendens*) in a part of the city Prayagraj (Uttar Pradesh), India. Journal of Experimental Zoology India 27 449–455. Available online at https://www.connectjournals.com/pages/articledetails/toc037913

Peh KSH 2002. Roosting behaviour of House Crow (*Corvus splendens*) in relation to environmental variables. Raffles Bulletin of Zoology 50: 257–262.

Peh, KSH, Sodhi NS 2002. Characteristics of nocturnal roosts of House Crows in Singapore. The Journal of Wildlife Management 66: 1128–1133.

Shabanam S, Soni VC, Radadia B 2017. A roosting site selection by Indian House Crow (*Corvus splendens*). International Journal of Fauna and Biological Studies 4: 10-13.

Vyas SN 1996. Studies on some aspects of ecology of the Indian Black Ibis *Pseudibis papillosa* at Rajkot. Ph. D. Thesis, Sourashtra University, Rajkot, India.

Walsberg GE 1986. Thermal consequences of roost site selection: the relative importance of three modes of heat conservation. Auk 103: 1–7.

Eid E, Khoury F 2025. Citizen science perceptions into the distribution and impacts of the Common Myna (*Acridotheres tristis*) in Jordan. Ornis Fennica 102: 1–11.

Grarock K, Tidemann CR, Wood J, Lindenmayer DB 2012. Is it benign or is it a pariah? Empirical evidence for the impact of the Common Myna (*Acridotheres tristis*) on Australian birds. PLoS ONE 7: e40622.

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